



MALFUNCTION INDICATOR LAMP IS ILLUMINATED WITH A CRANKSHAFT ADAPTION FAULT

This Service Information Bulletin (Revision 1) replaces SI B11 12 19 **dated December 2019**.

What's New (Specific text highlighted):

- Model
- Situation
- Cause
- Procedure
- Parts Information
- Warranty Information

MODEL

F39 (X2 Sports Activity Coupe) with B46D, B48E	F44 (2 Series Gran Coupe) with B46D, B48E	F48 (X1 Sports Activity Vehicle) with B46D	G01 (X3 Sports Activity Vehicle) with B46D, B58D, XB1G
G02 (X4 Sports Activity Coupe) with B46D, B58D	G05 (X5 Sports Activity Vehicle) with B58C	G06 (X6 Sports Activity Coupe) with B58C	G07 (X7 Sports Activity Vehicle) with B58C
G12 (7 Series Sedan) with B58C and XB1	G14 (8 Series Convertible) with B58C	G15 (8 Series Coupe) with B58C	G16 (8 Series Gran Coupe) with B58C
G20 (3 Series Sedan) with B46D B58D	G29 (Z4 Roadster) with B46D, B58D	G30 (5 Series Sedan) with B46D, B58C	G32 (640i xDrive Gran Turismo) with B58C

SITUATION

When diagnosing an illuminated malfunction indicator lamp (MIL) and/or a different issue, the following faults may also be stored in the Digital Motor Electronics (DME).

Fault code	Control module	Fault code text
213A2B	DME	Increment wheel adaption faulty

This situation is not associated with any drivability complaints and only affects vehicles built with a **Factory I-level of 19-07-500** and later.

CAUSE

An unfavorable DME diagnostic calibration may cause the fault code to be stored. In most circumstances, this will cause the MIL to be illuminated.

CORRECTION

Program the vehicle with the latest version of ISTA Next

PROCEDURE

1. Connect the vehicle to a BMW-approved battery charger (Refer to [SI B04 23 10](#)).
2. Program the vehicle using the latest version of ISTA Next to the appropriate I-level shown below:

For all **6-cylinder engines** (B58C, B58D, XB1) use **ISTA 4.21.3x** (expected to be release February 2020, pending verification) or higher.

Model	Target I-level
G05 (X5 Sports Activity Vehicle)	S18A-19-11-555 or later
G06 (X6 Sports Activity Coupe)	
G07 X7 Sports Activity Vehicle	
G14 (8 Series Convertible)	
G15 (8 Series Coupe)	
G16 (8 Series Gran Coupe)	
G20 (3 Series Sedan)	
G29 (Z4 Roadster)	

Model	Target I-level
G01 (X3 Sports Activity Vehicle)	S15A-19-11-555 or later
G02 (X4 Sports Activity Coupe)	
G12 (7 Series Sedan)	
G30 (5 Series Sedan)	
G32 (640i xDrive Gran Turismo)	

Until ISTA 4.21.3x is released:

1. Replace the crankshaft increment wheel
2. Reset the increment wheel adaption by following the path:
 - Service functions
 - Powertrain
 - Engine electronics
 - Reset adaptations
 - ABL Reset adaption values

Note: Replacing the crankshaft sensor or deleting increment wheel adaption, without replacing the crankshaft increment wheel, will not resolve the issue.

For all **4-cylinder engines** (B46D, B48E, XB1G) use **ISTA 4.20.3x** (released late November 2019) or higher:

Model	Target I-level
G20 (3 Series Sedan)	S18A-19-11-534 or later
G29 (Z4 Roadster)	
F44 (2 Series Gran Coupe)	

Model	Target I-level
G01 (X3 Sports Activity Vehicle)	S15A-19-11-534 or later
G02 (X4 Sports Activity Coupe)	
G30 (5 Series Sedan)	
G32 (640i xDrive Gran Turismo)	

Model	Target I-level
F39 (X2 Sports Activity Coupe)	F056-19-11-534 or later
F48 (X1 Sports Activity Vehicle)	

Note: ISTA will automatically reprogram and code all programmable control modules that do not have the latest software.

For information on programming and coding with ISTA, refer to CenterNet / TIS / Technical Documentation / Programming and Diagnostics / Programming Documentation

PARTS INFORMATION

Only for 6-cylinder engines prior to the release of ISTA 4.21.3:

Obtain and confirm the part numbers for your specific vehicle by entering the chassis number in either ETK or AIR which takes into account specific equipment and/or options.

Note: Before carrying out the repair, the specific repair instructions must be reviewed. Additional small parts are required to replace the crankshaft increment wheel.

Part Number	Description	Quantity
11 14 8 605 104	Crankshaft increment wheel	1

WARRANTY INFORMATION

During this workshop visit, the affected vehicle may also show one or more programming and encoding Technical Campaign repairs open, the programming and encoding procedure may only be invoiced one time.

If you should have this situation, update the vehicle to the current available I-level by performing and submitting for one of these open Technical Campaigns instead. Please be sure to also perform any additional work the campaign repairs require and/or close the remaining open programming and encoding Campaign repairs as outlined in the corresponding Service Information Bulletin.

Only if the situation above does not apply, the BMW software solution is then:

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks.

Defect Code:	1042044200	Cruising speed in all op conditions misfiring
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In conjunction with the:

Diagnosis and repair of another issue which did not include performing a programming and encoding procedure (All except for the B58C, B58D, XB1 6-cylinder engine vehicles)-

Labor Operation	Labor Allowance	Description
61 00 730	Programming/encoding control unit(s)	Refer to AIR

Or, with:

Diagnosis with performing and a programming and encoding procedure (All except for the B58C, B58D, XB1 6-cylinder engine vehicles)-

Labor Operation	Labor Allowance	Description
00 00 006	Performing vehicle test (with vehicle diagnosis system – checking faults) (Main work)	Refer to AIR
Or:		
00 00 556	Performing vehicle test (with vehicle diagnosis system – checking faults) (Plus work)	Refer to AIR
And:		
61 21 528	Connect an approved battery charger/power supply (indicated in AIR as Charging battery)	Refer to AIR
And:		
61 00 730	Programming/encoding control unit(s)	Refer to AIR

If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead of 00 00 006.

Or:

For 6-cylinder engine (B5x, XB1) vehicles prior to the February 2020 software release-

Labor Operation	Labor Allowance	Description
00 00 006	Performing vehicle test (with vehicle diagnosis system – checking faults) (Main work)	Refer to AIR
Or:		
00 00 556	Performing vehicle test (with vehicle diagnosis system – checking faults) (Plus work)	Refer to AIR
And:		
61 21 528	Connect an approved battery charger/power supply (indicated in AIR as Charging battery)	Refer to AIR
And:		
11 22 505	Removing and installing/replacing the flywheel (Plus Work)	Refer to AIR
And:		
11 99 000	Work time for mounting the segment wheel and resetting the crankshaft segment wheel adaption	2 FRU

If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead of 00 00 006.

And, as needed for the 6-cylinder engine repair:

Sublet – Bulk Materials (RO and Claim Comments Required)-

Sublet Code 4	See the sublet reimbursement calculations below	Reimbursement for the repair-related bulk materials (Do not use the BMW part numbers for claim submission)
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Sublet reimbursement calculation for claiming the applicable repair-related bulk materials (BMW part numbers) is at the dealer net price amount for the quantities used plus your center’s handling.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.

Refer to AIR for the corresponding flat rate unit (FRU) allowances.

Programming and Encoding - Vehicle Control Units (RO and Claim Comments Required)

The programming procedure automatically reprograms and encodes all vehicle control modules which do not have the latest software I-level. If one or more control module failures occur during this programming procedure:

- Please claim this consequential control module-related IRAP recovery procedure (when applicable as required)/repair work under the defect code listed in this bulletin with the applicable AIR labor operations.

Please explain this additional work (The why and what) on the repair order and in the claim comments section

For control module failures that occurred prior to performing this programming procedure:

- When covered under an applicable limited warranty, claim the applicable test plan and the corresponding control module-related repair work using the applicable defect code and labor operations in AIR (including diagnosis with separate punch times).